

**Tg ( DSC ) of cast PU resin based on 4 different polyols with different amounts of glycerin**

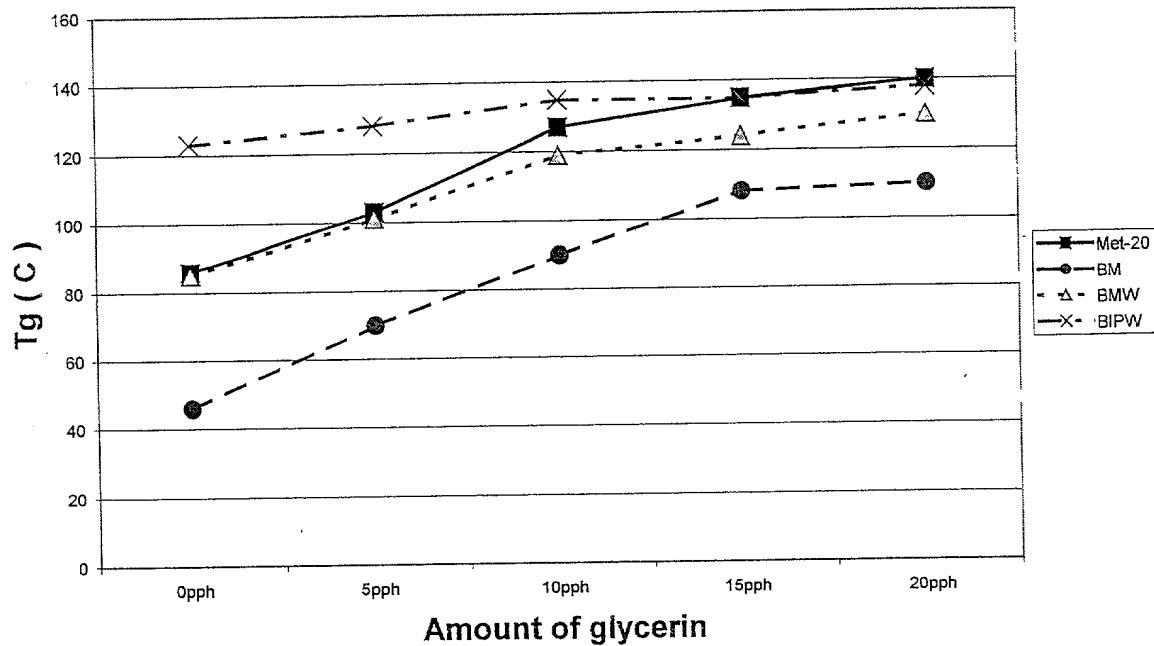


FIG. 1

**Flexural modulus of cast PU resin based on 4 different polyols with different amounts of glycerin**

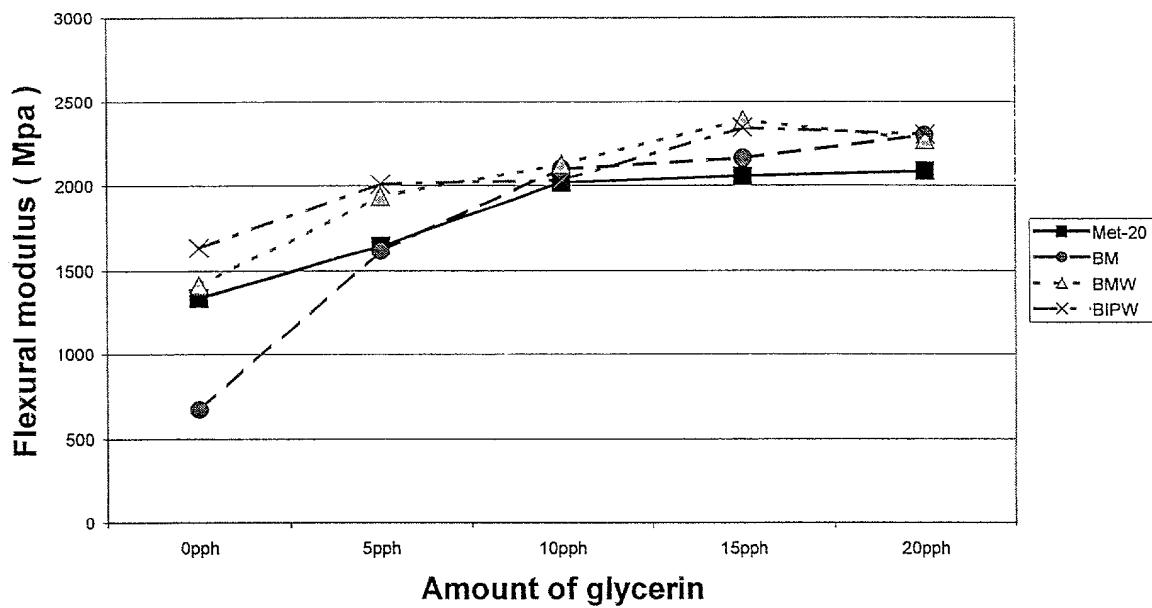


FIG. 2

**Tensile strength of cast PU resin based on 4 different polyols with different amounts of glycerin**

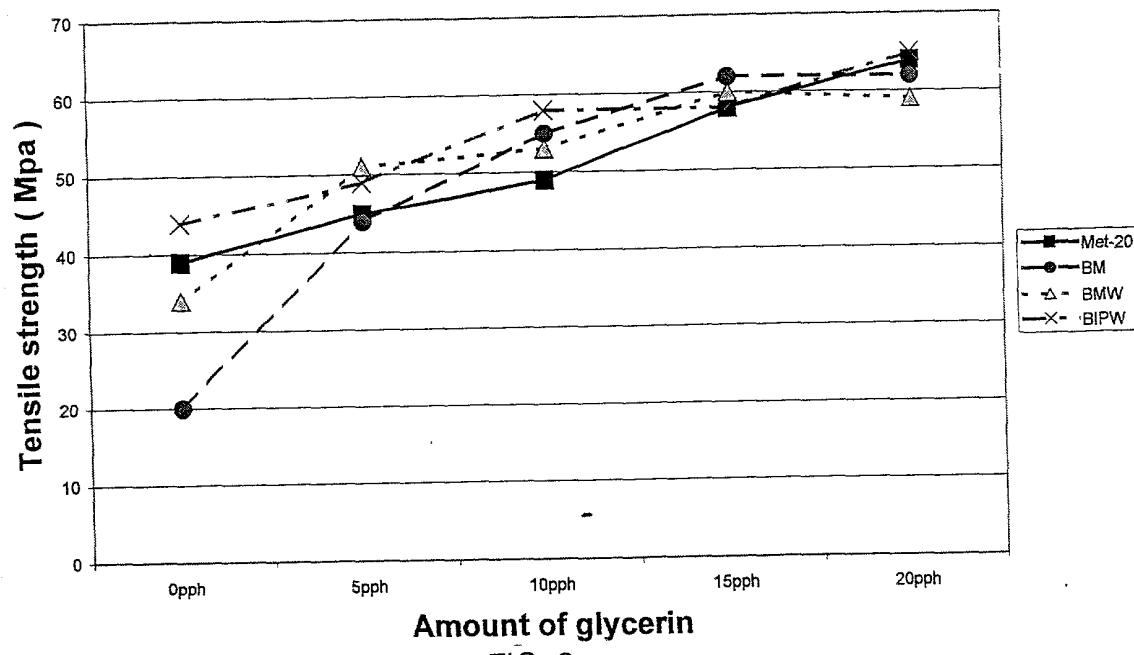


FIG. 3

**Compressive strength of cast PU resin based on 3 different polyols with different amount of glycerin**

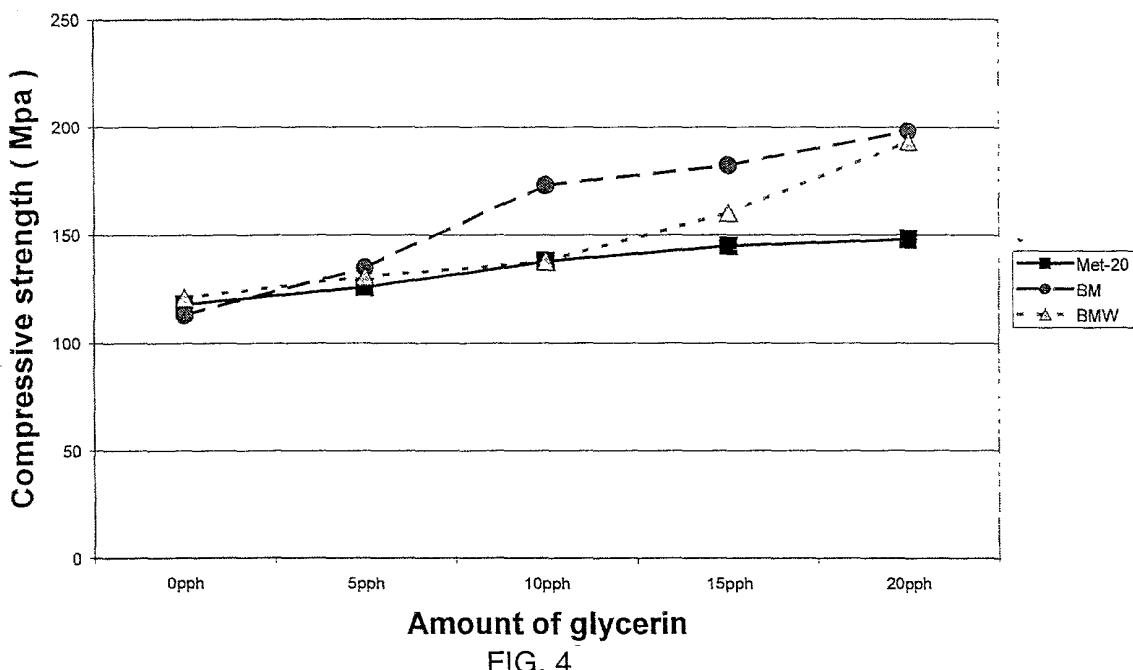


FIG. 4

**Hardness of cast PU resin based on 4 different polyols with different amount of glycerin**

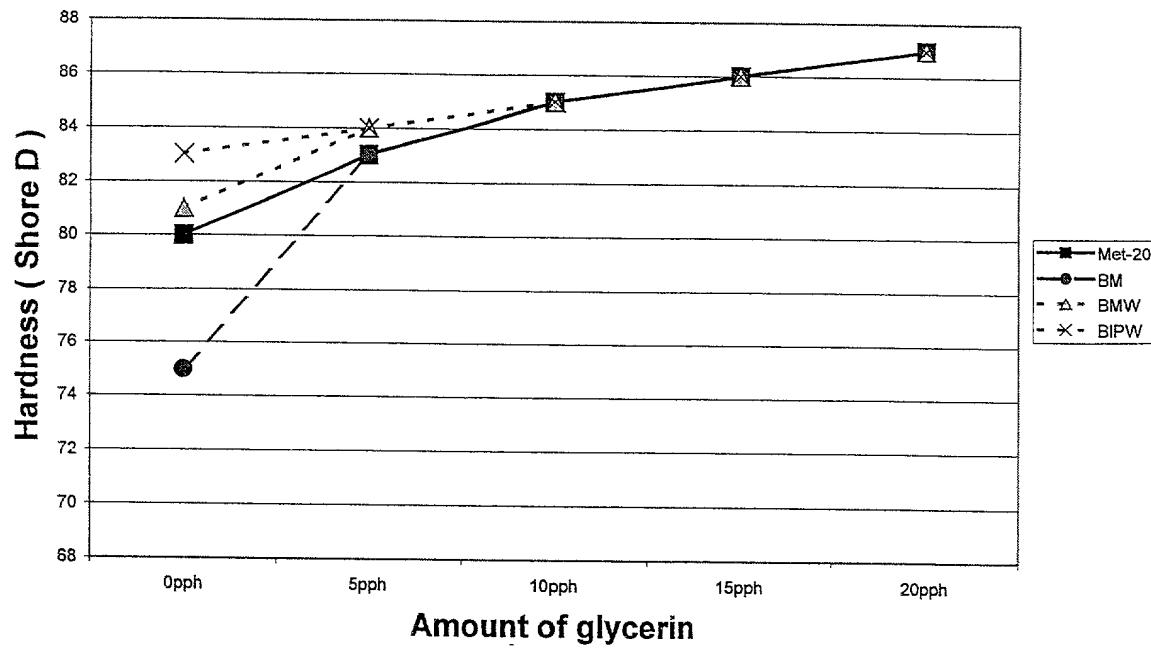
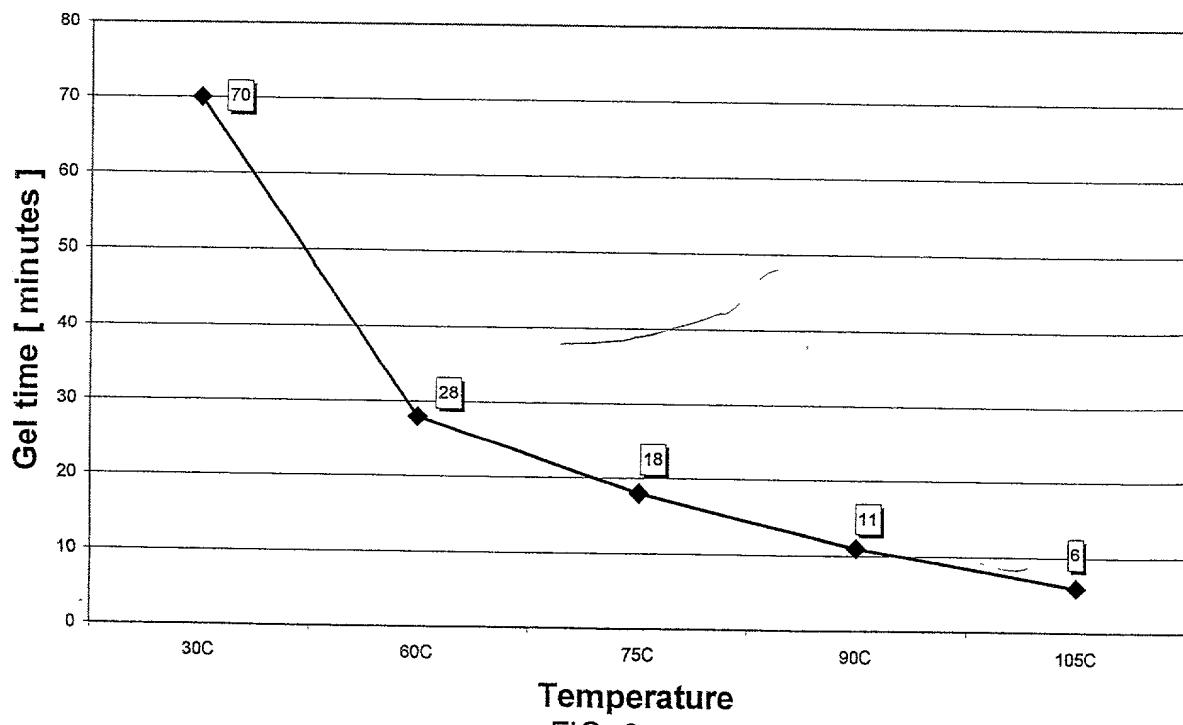


FIG. 5

**Effect of temperature on gel time**



Temperature

FIG. 6

### Effect of amount of catalyst on gel time at 30C

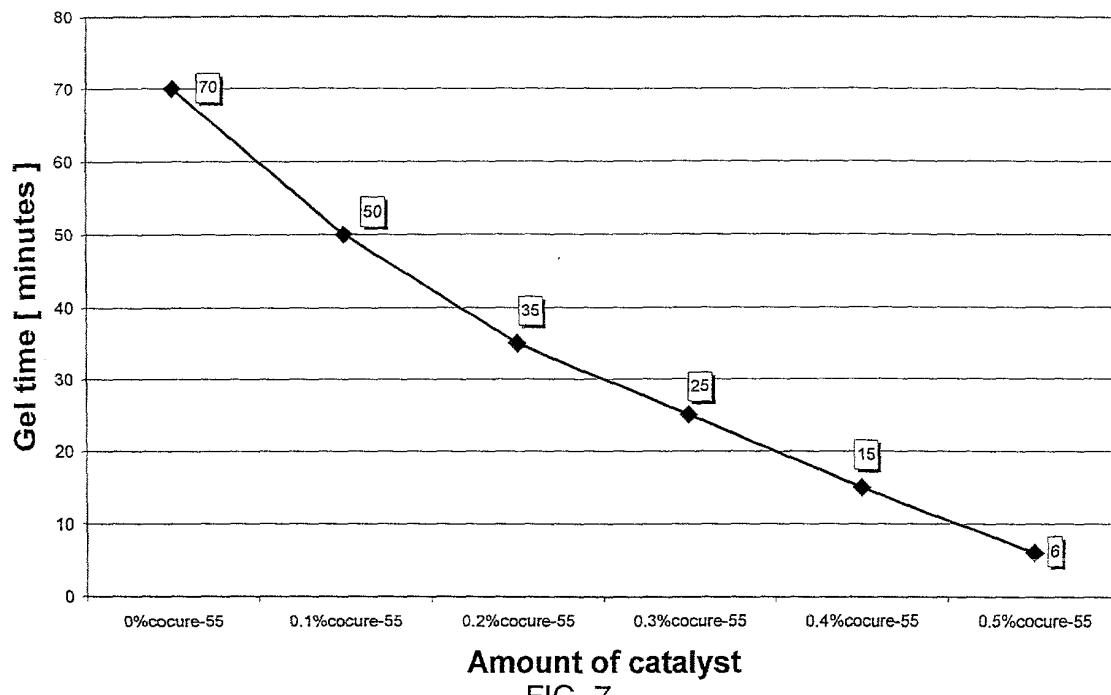


FIG. 7

### Effect of NCO/OH ratio on mechanical strength of polymer concrete

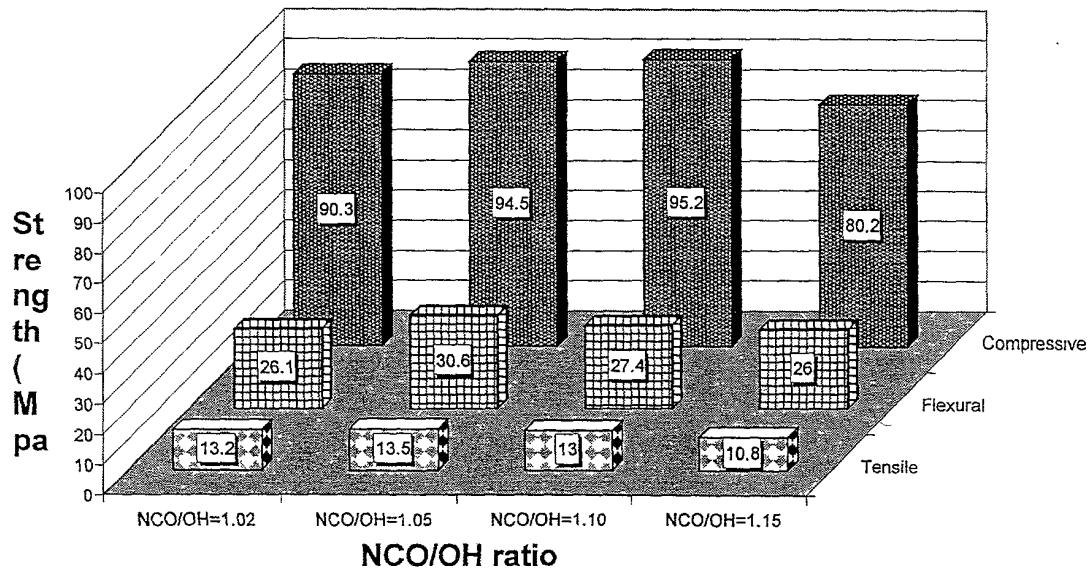


FIG. 8

### Effect of resin amount on mechanical strength of polymer concrete

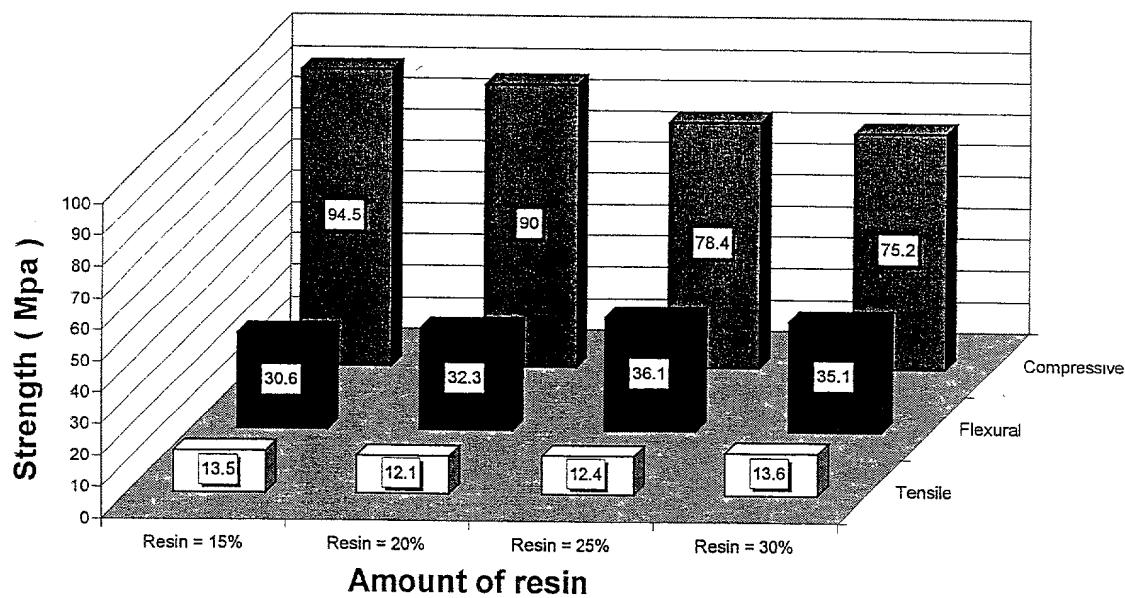


FIG. 9

### Effect of amount of fine powder on mechanical strength of polymer concrete

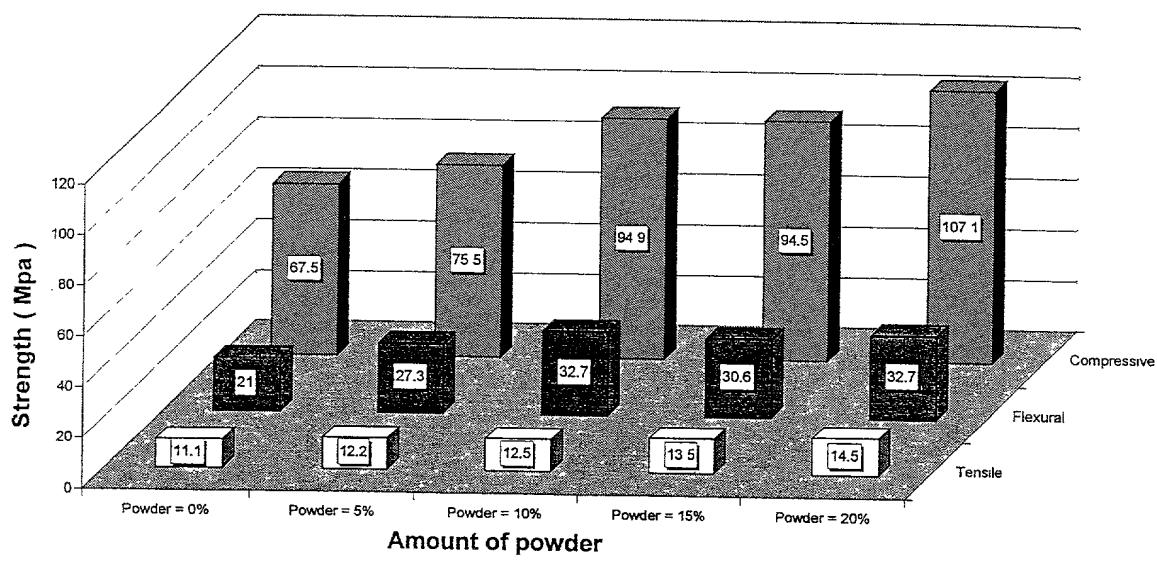


FIG. 10

### Effect of amount of pea gravel on mechanical strength of polymer concrete

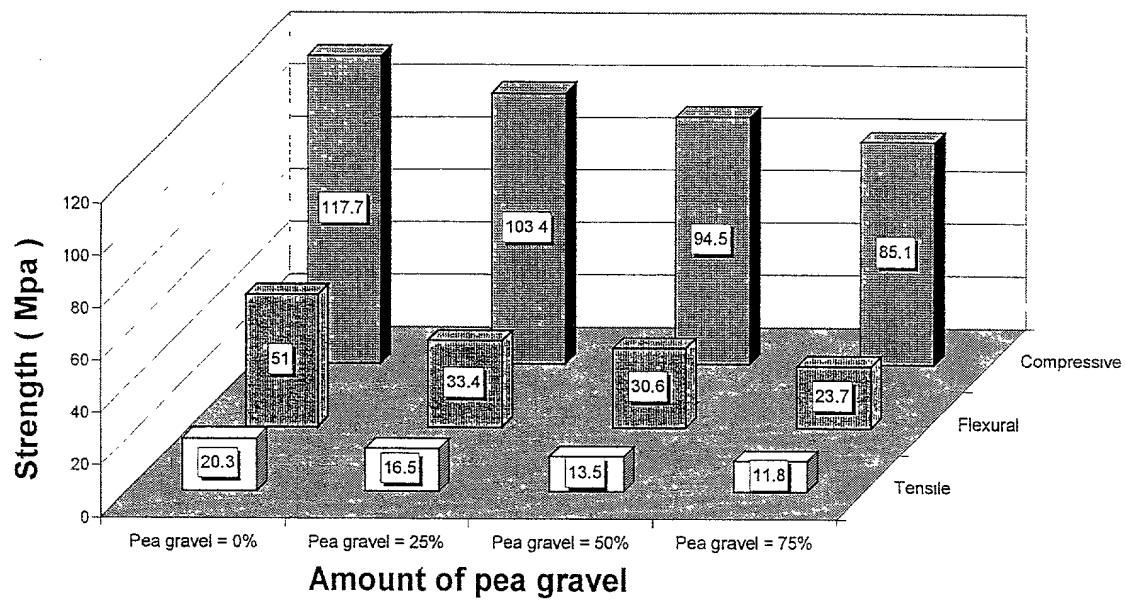


FIG. 11

### Effect of sand type on mechanical strength of polymer concrete

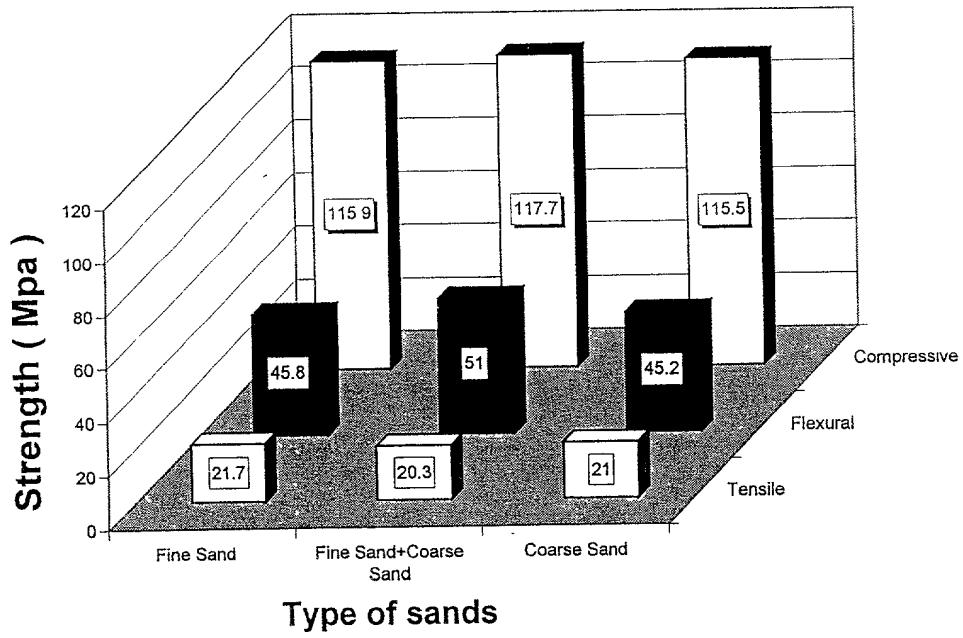


FIG. 12

**Effect of amount of glycerin on mechanical strength of polymer concrete ( with pea gravel )**

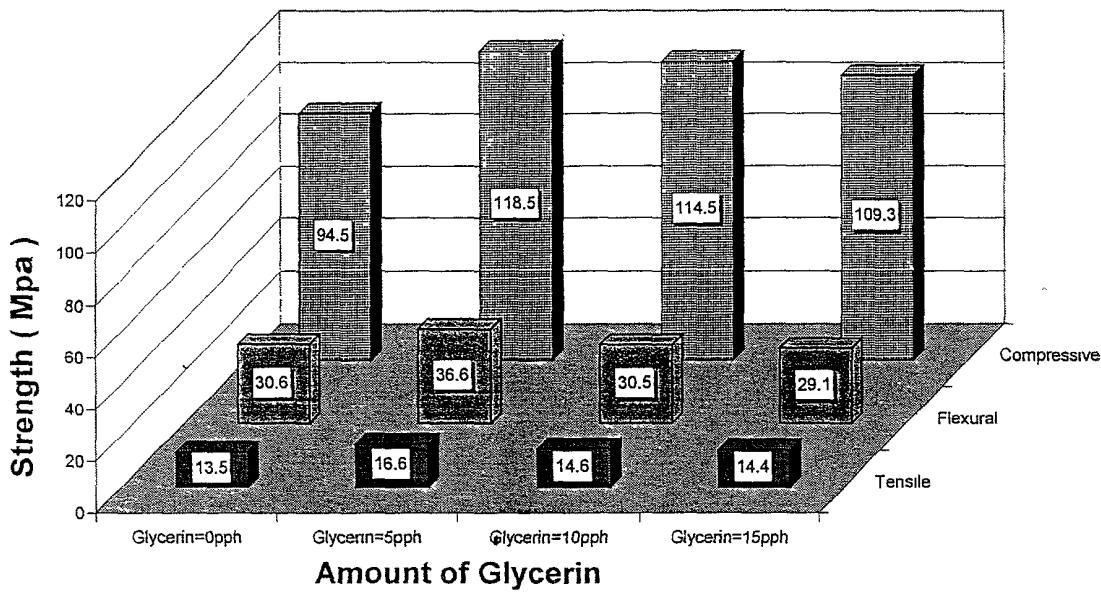


FIG. 13

**Effect of amount of glycerin on mechanical strength of polymer concrete ( without pea gravel )**

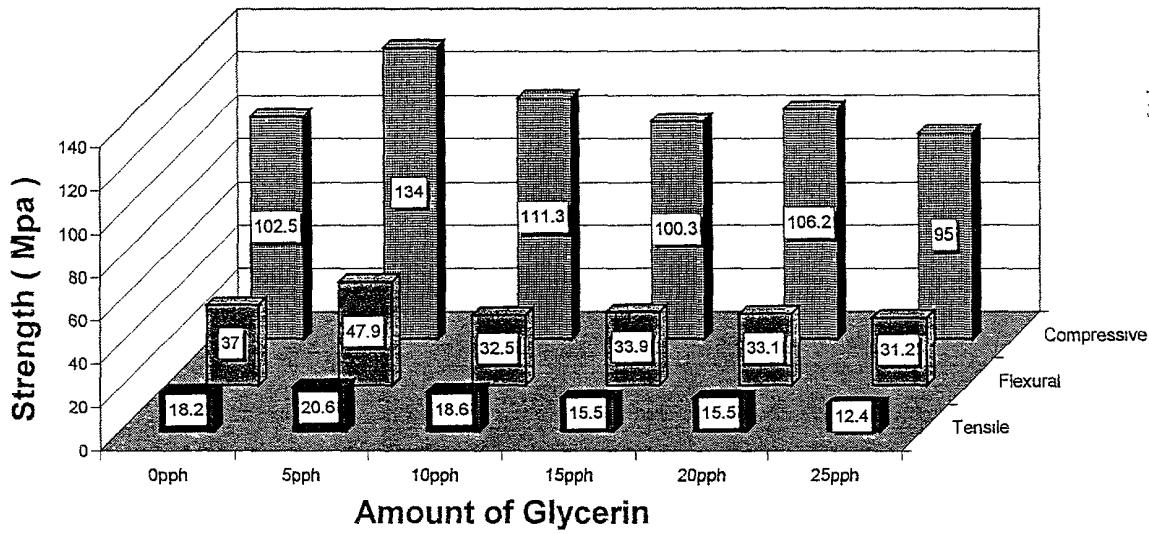


FIG. 14

### Effect of curing temperature on mechanical strength of polymer concrete

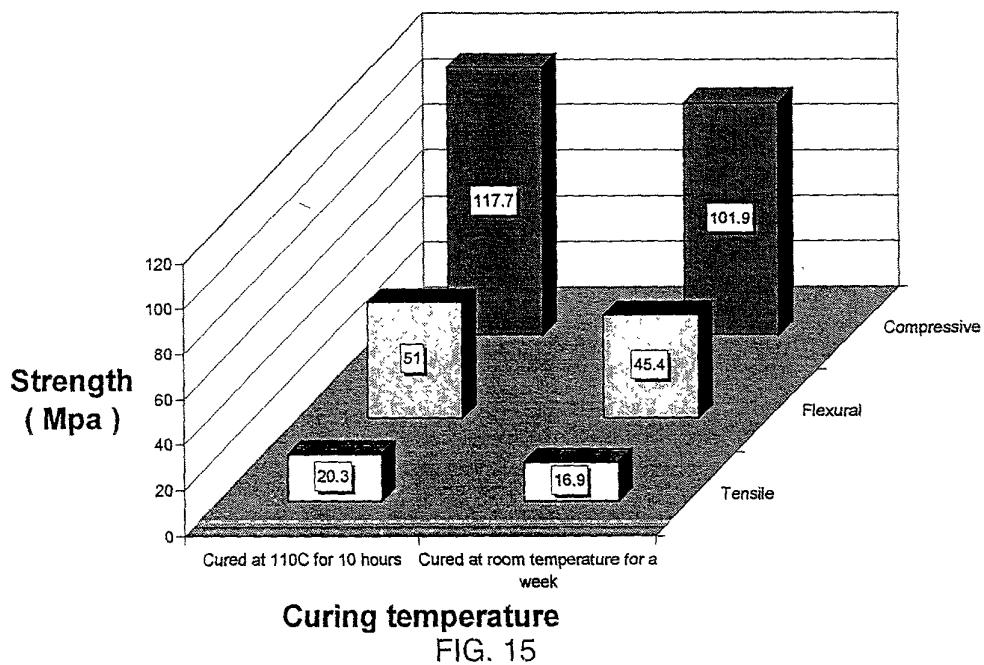


FIG. 15

### Effect of amount of catalyst on mechanical strength of polymer concrete (cured for a week)

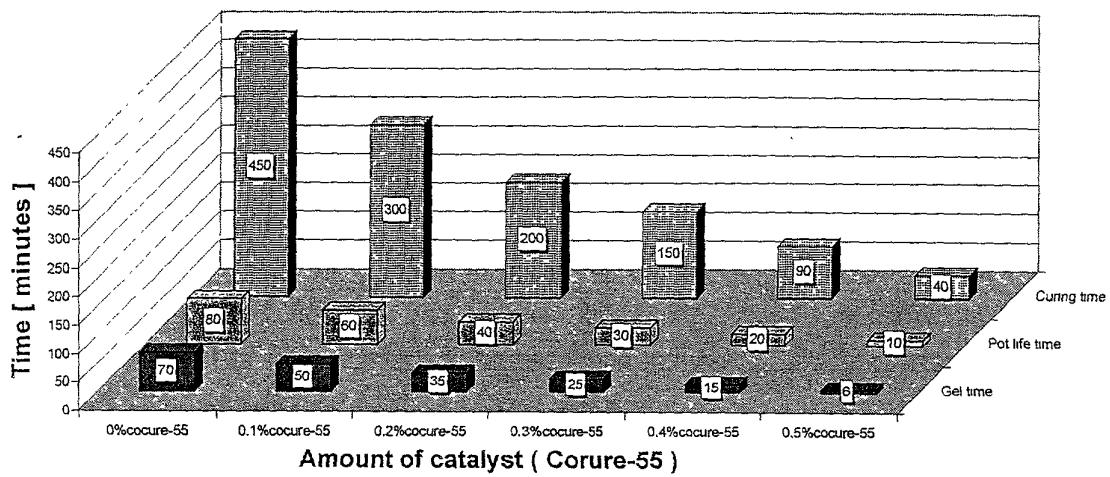


FIG. 16

**Effect of amount of catalyst on mechanical strength  
of polymer concrete ( cured for 24 hours )**

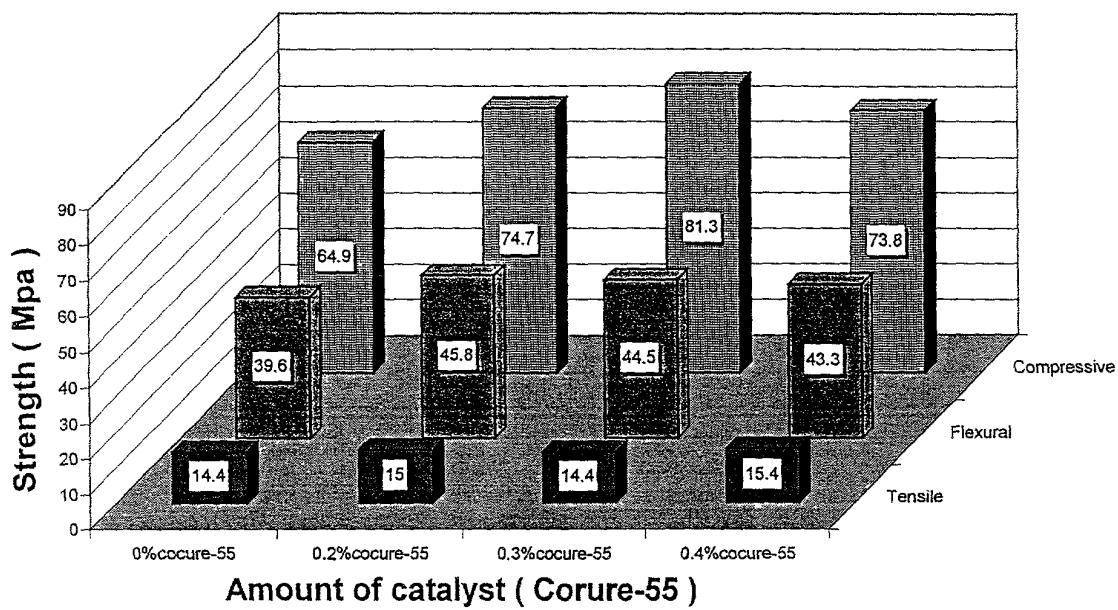


FIG. 17

**Effect of amount of catalyst on mechanical strength  
of polymer concrete ( cured for a week )**

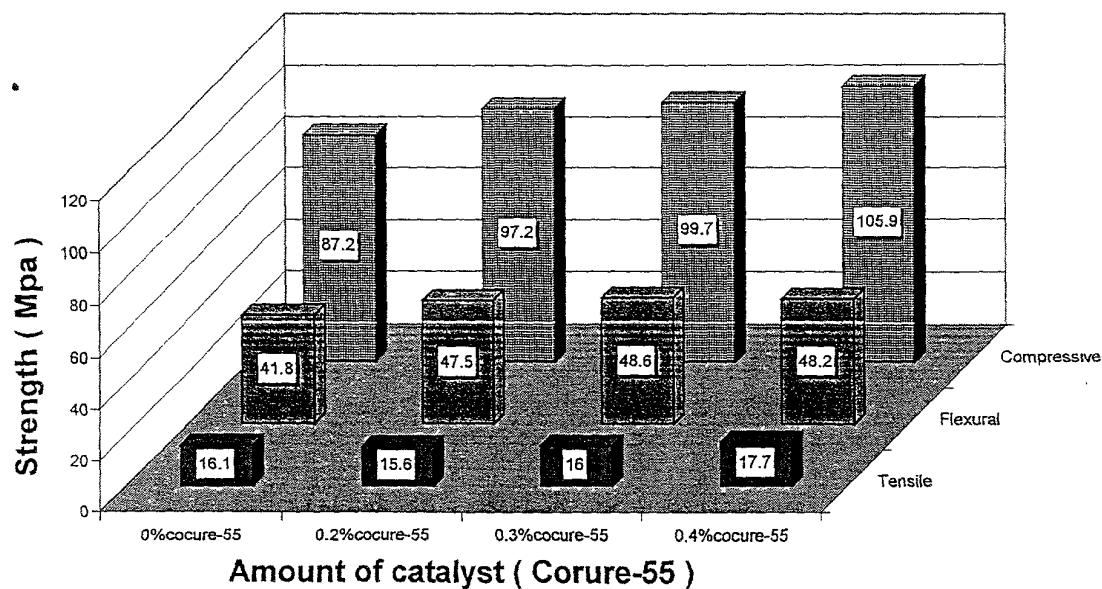


FIG. 18

**Effect of catalyst on mechanical strength of  
polymer concrete**  
**( room temperature cured for 2 weeks, )**

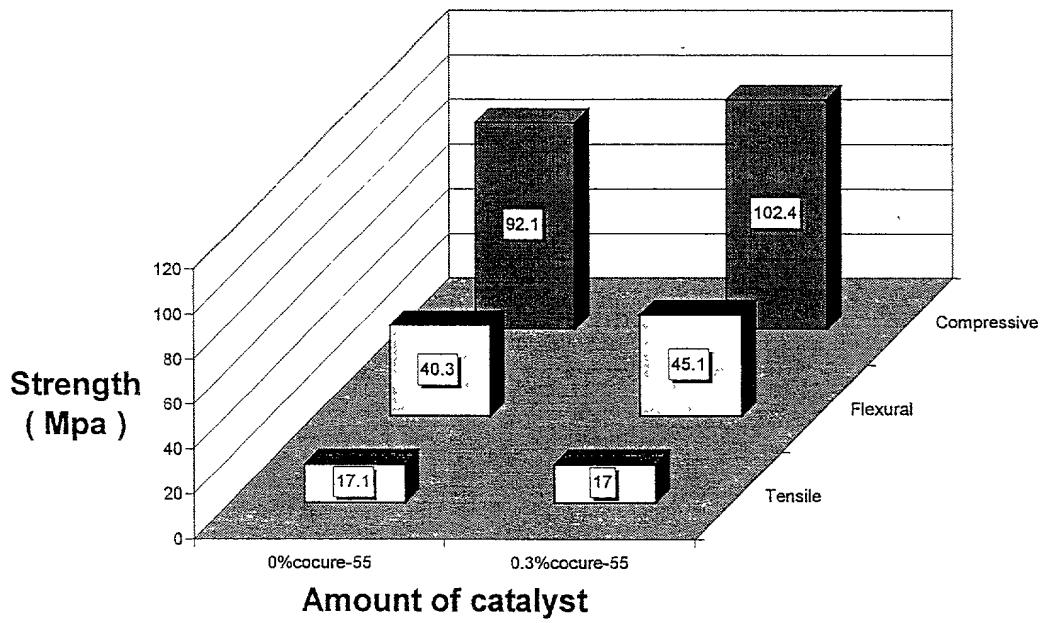


FIG. 19

**Effect of catalyst on mechanical strength of  
polymer concrete**  
**( room temperature cured for 1 month )**

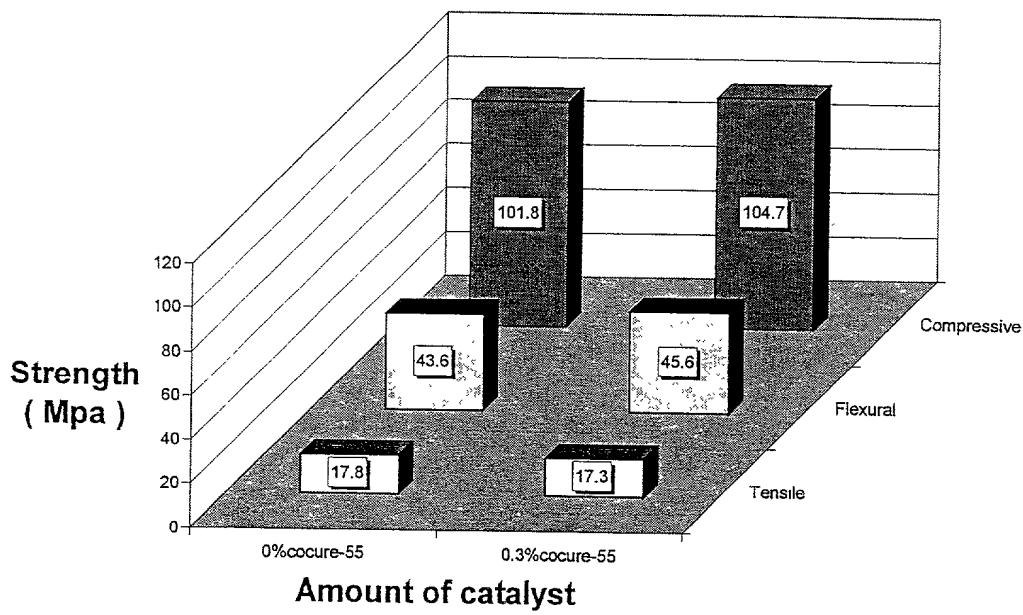


FIG. 20

**Effect of catalyst on mechanical strength of polymer concrete  
( room temperature cured for 2 month )**

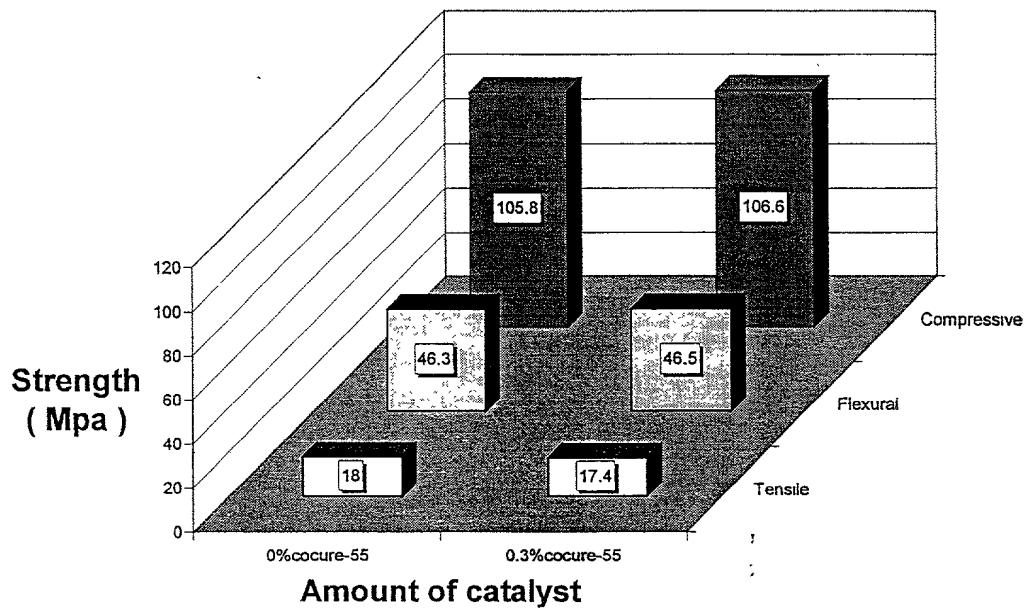


FIG. 21

**Effect of catalyst on mechanical strength of polymer concrete  
( room temperature cured for 3 month )**

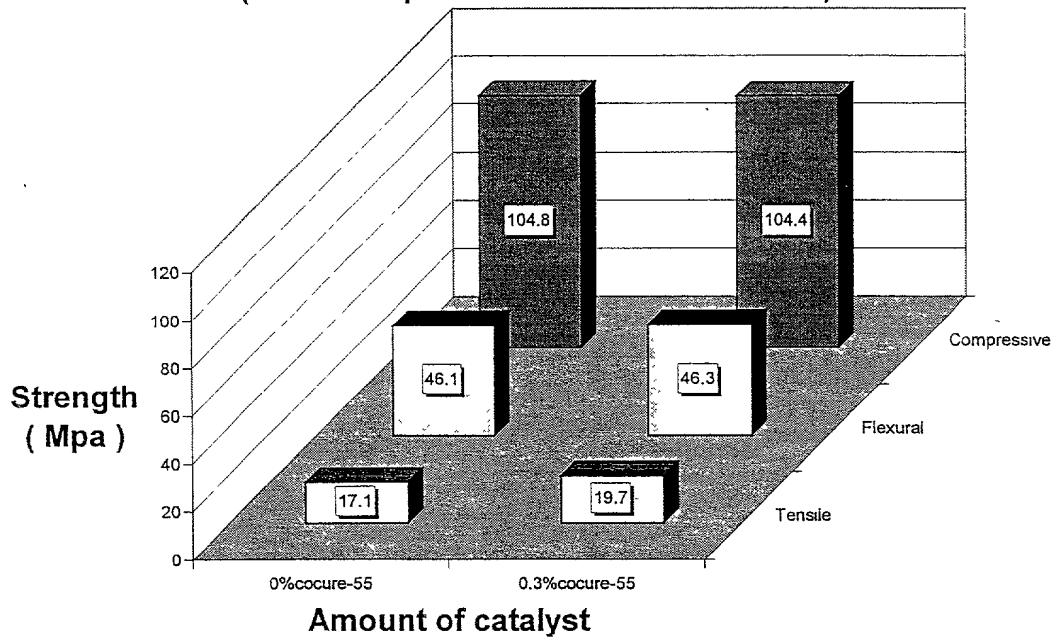


FIG. 22

**Effet of curing time on the mechanical properties  
of Soy-based PU concrete samples cured at room temperature  
without catalyst**

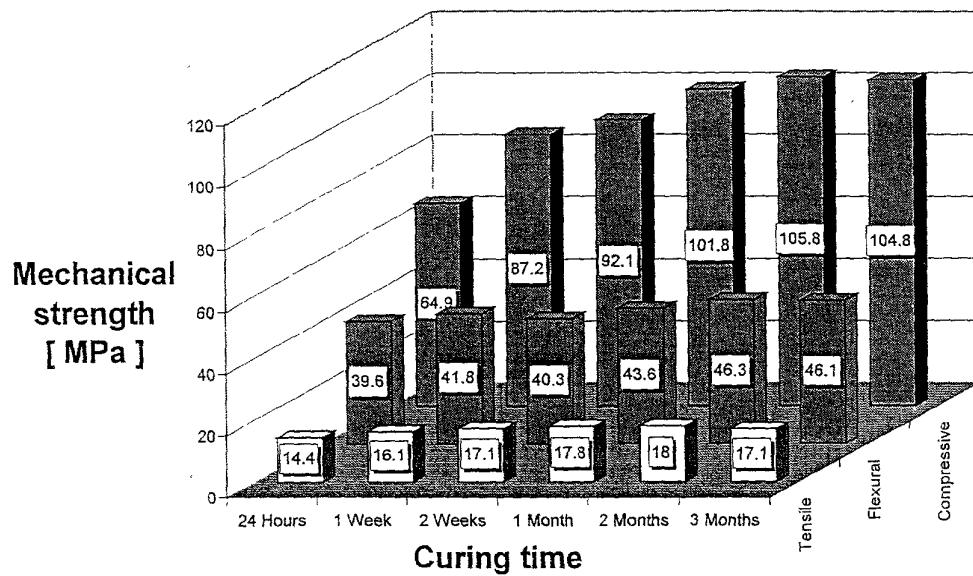


FIG. 23

**Effet of curing time on the mechanical properties  
of Soy-based PU concrete samples cured at room temperature  
with 0.3% cocure 55 as a catalyst**

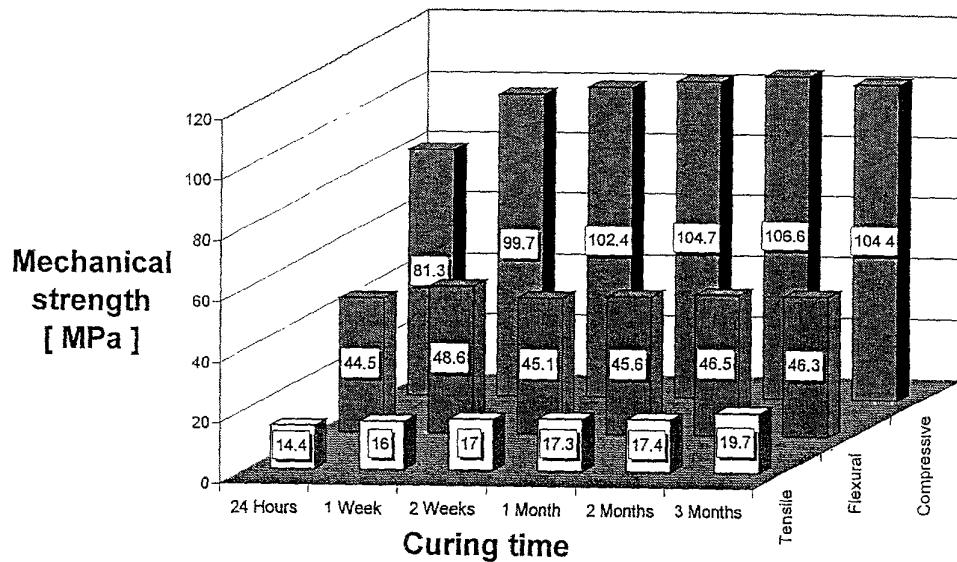


FIG. 24

Tg of polymer concrete samples based on different matrix resins

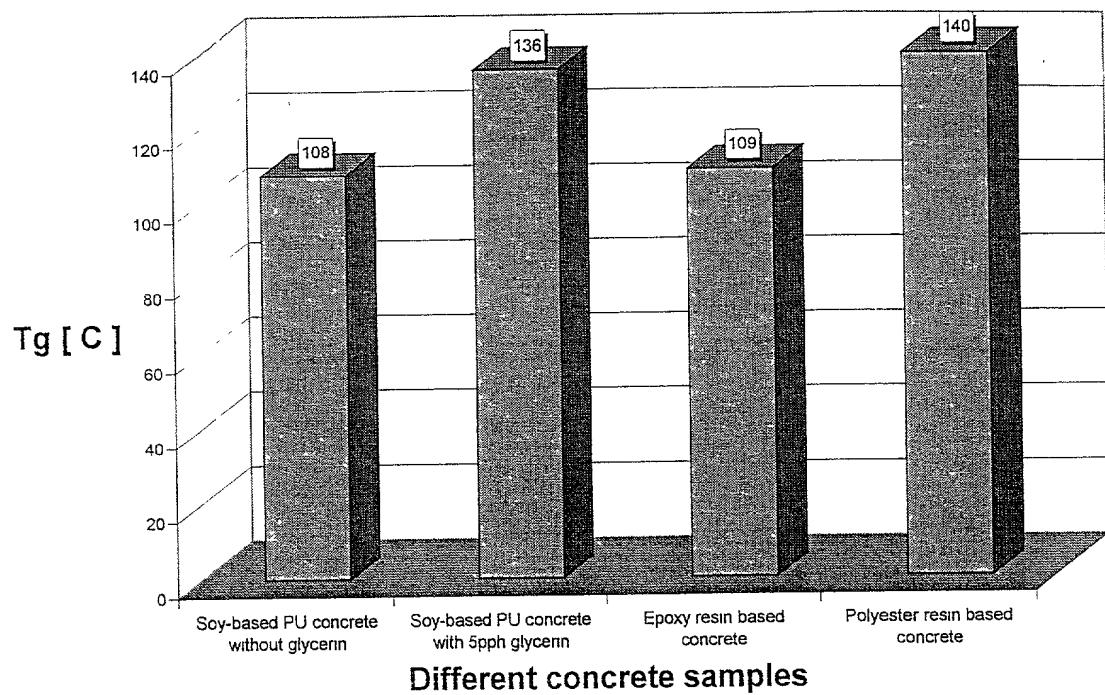


FIG. 25

Splitting tensile strength of polymer concrete samples based on different matrix resins

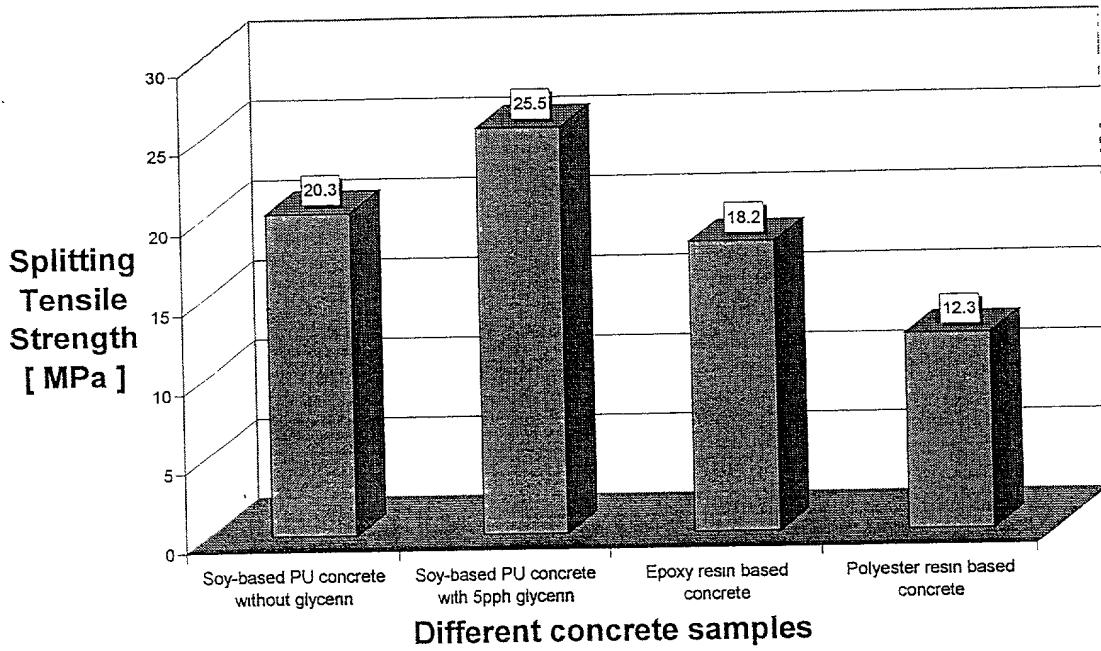


FIG. 26

**Compressive strength of polymer concrete samples based on different matrix resins**

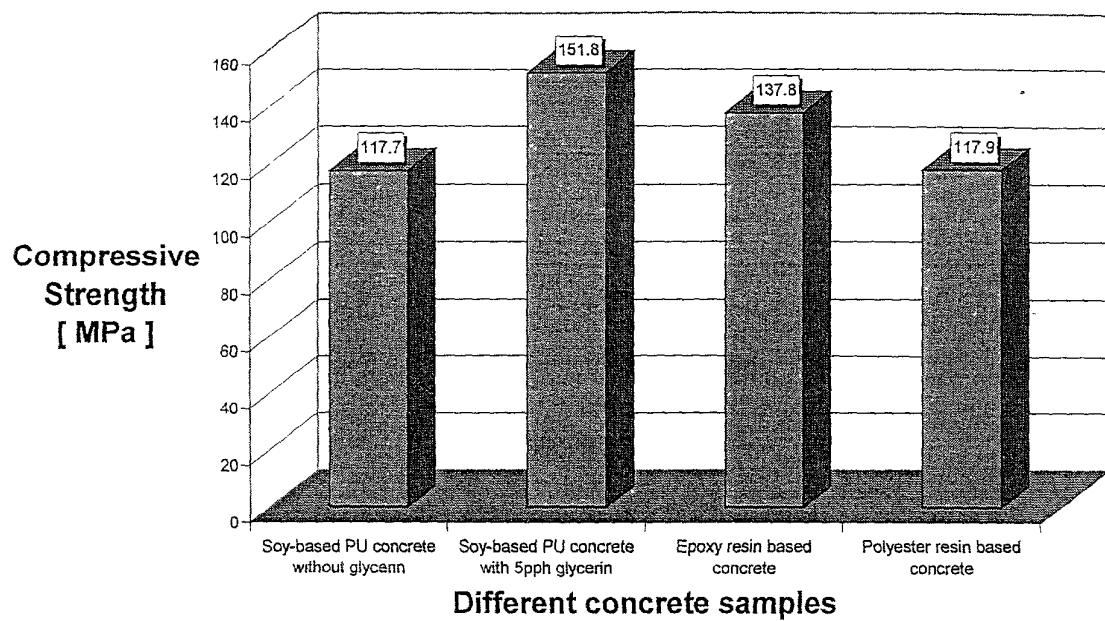


FIG. 27

**Bending strength (MOR) of polymer concrete samples based on different matrix resins**

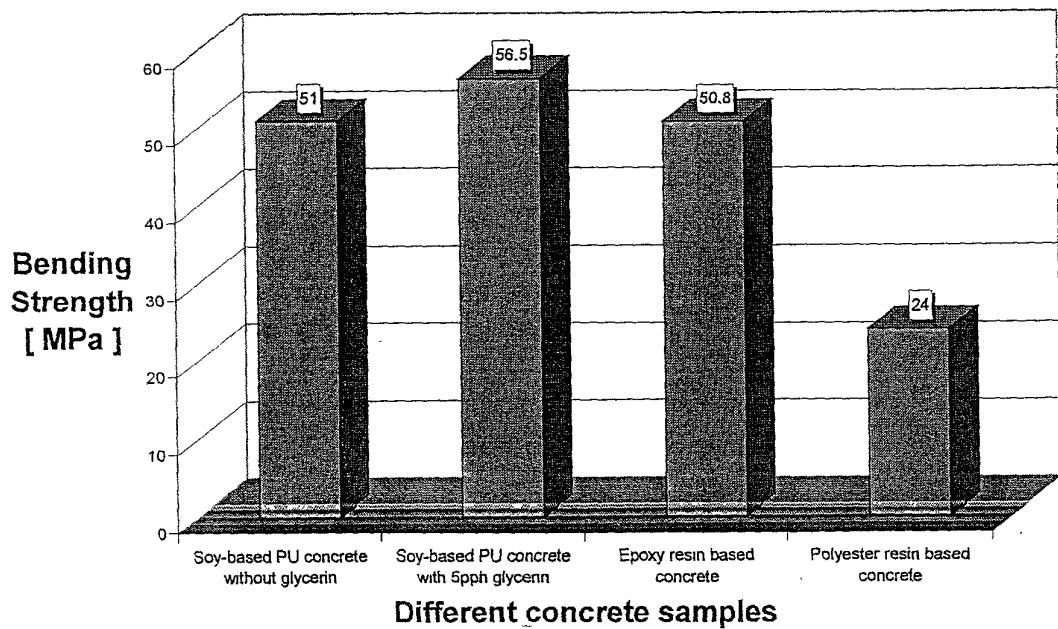


FIG. 28

**Flexural modulus of polymer concrete samples  
based on different matrix resins**

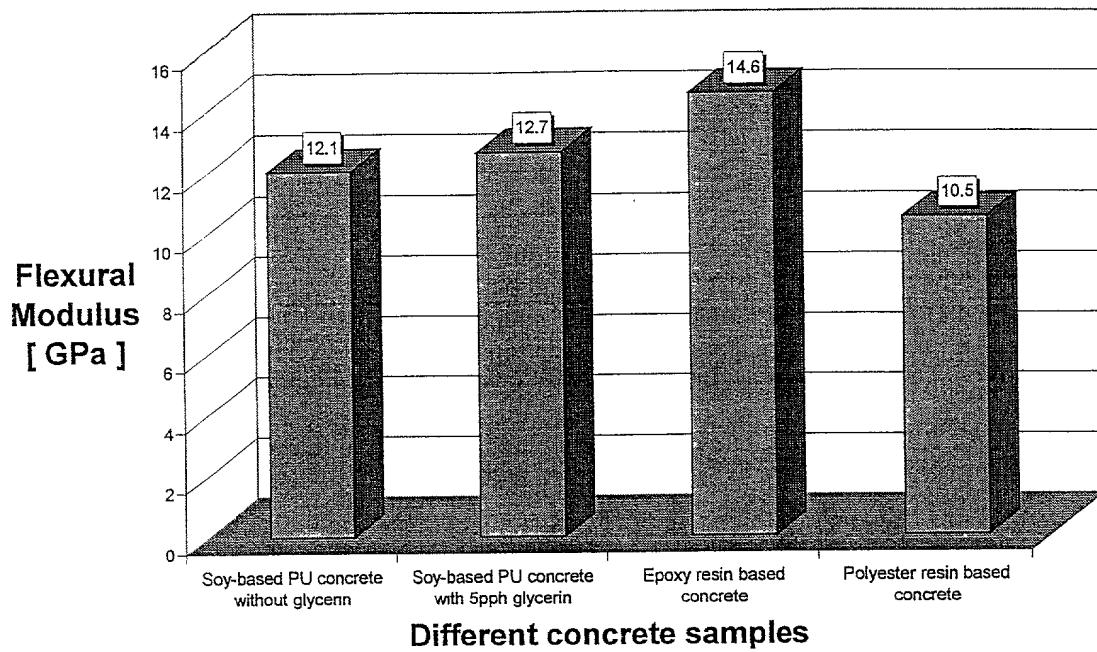


FIG. 29

**Abrasion resistance of polymer concrete samples  
based on different matrix resins**

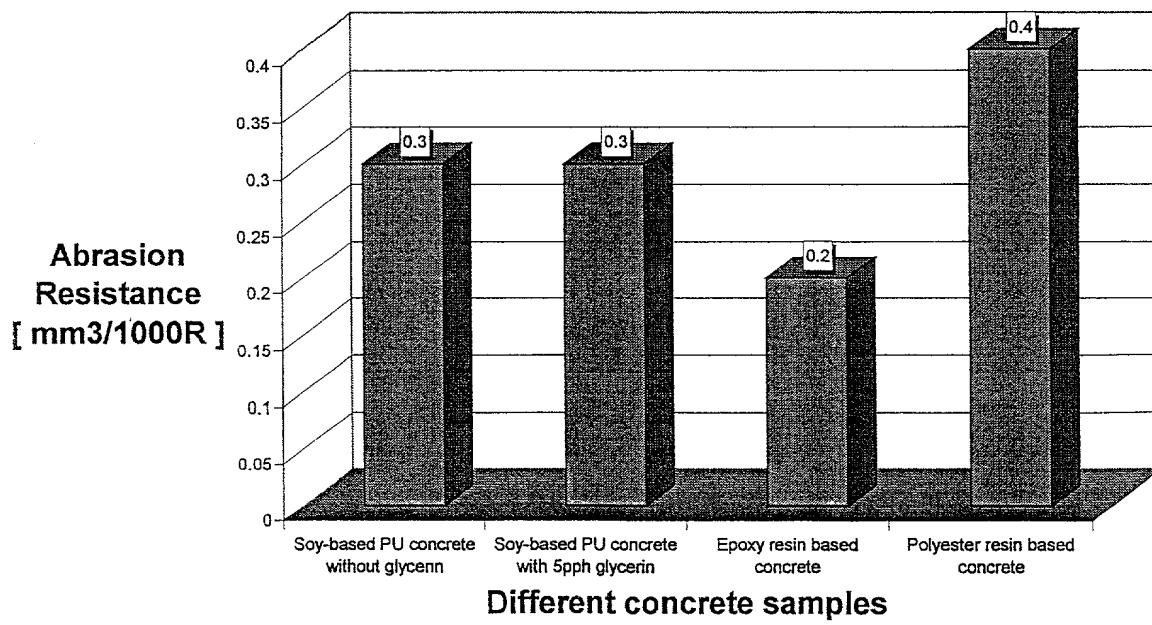


FIG. 30

### Effect of water on mechanical strength of polymer concrete

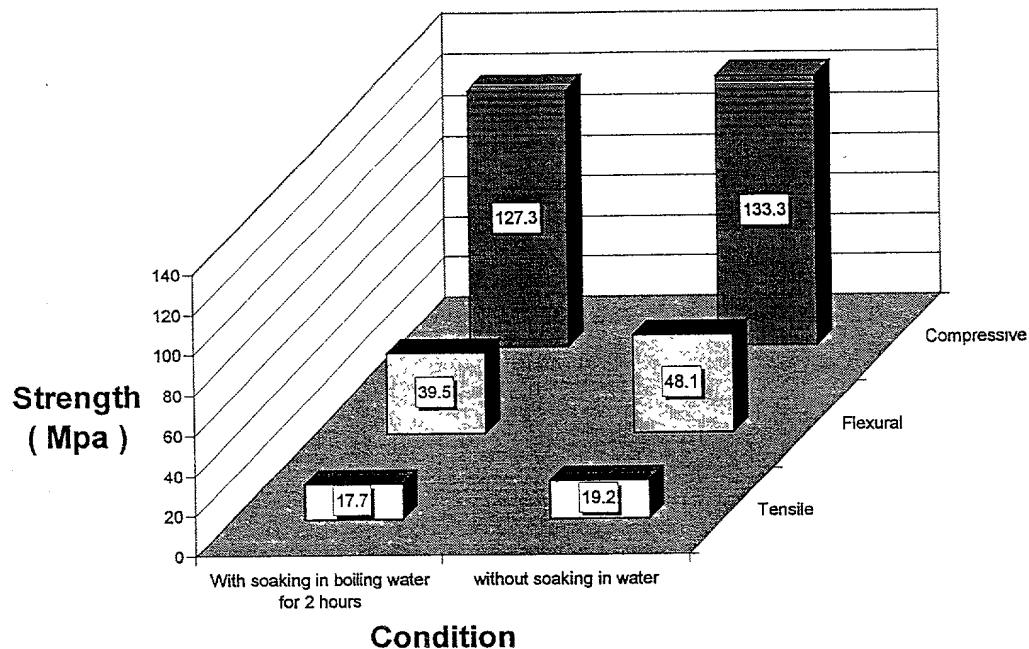


FIG. 31

### Density of Soy-based PU polymer concrete and conventional concrete

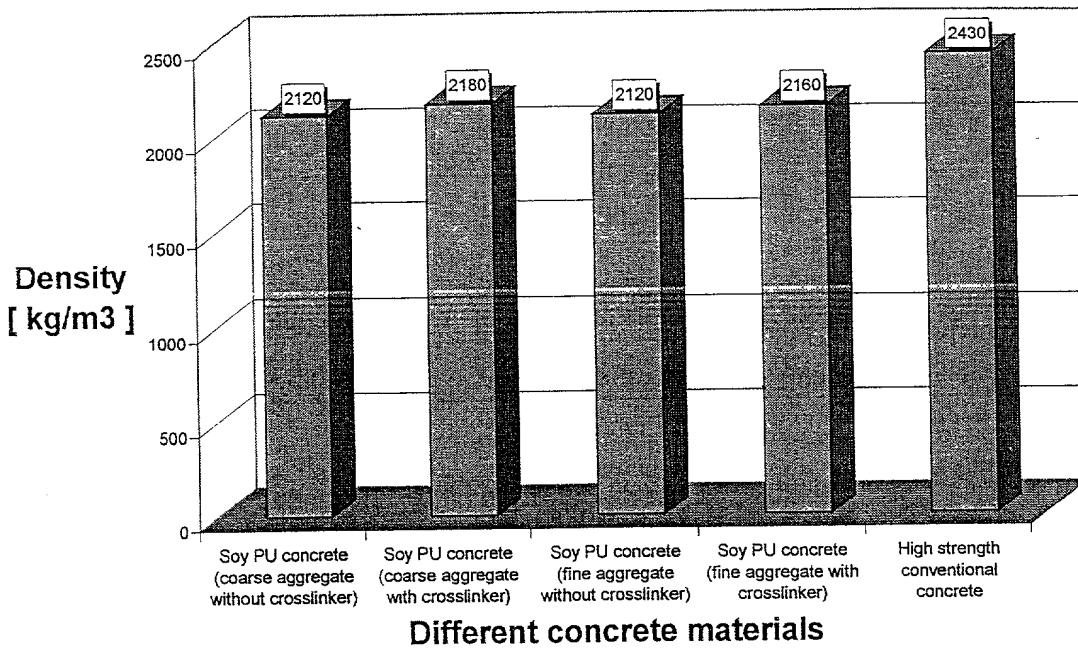


FIG. 32

### Splitting tensile strength of Soy-based PU polymer concrete and conventional concrete

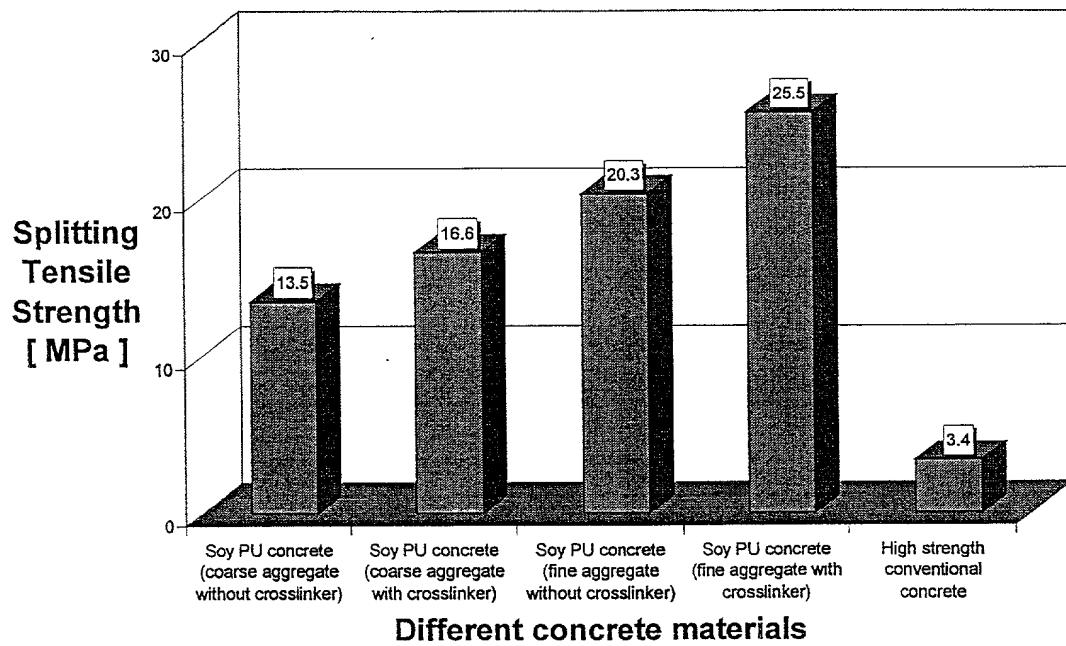


FIG. 33

### Flexural strength of Soy-based PU polymer concrete and conventional concrete

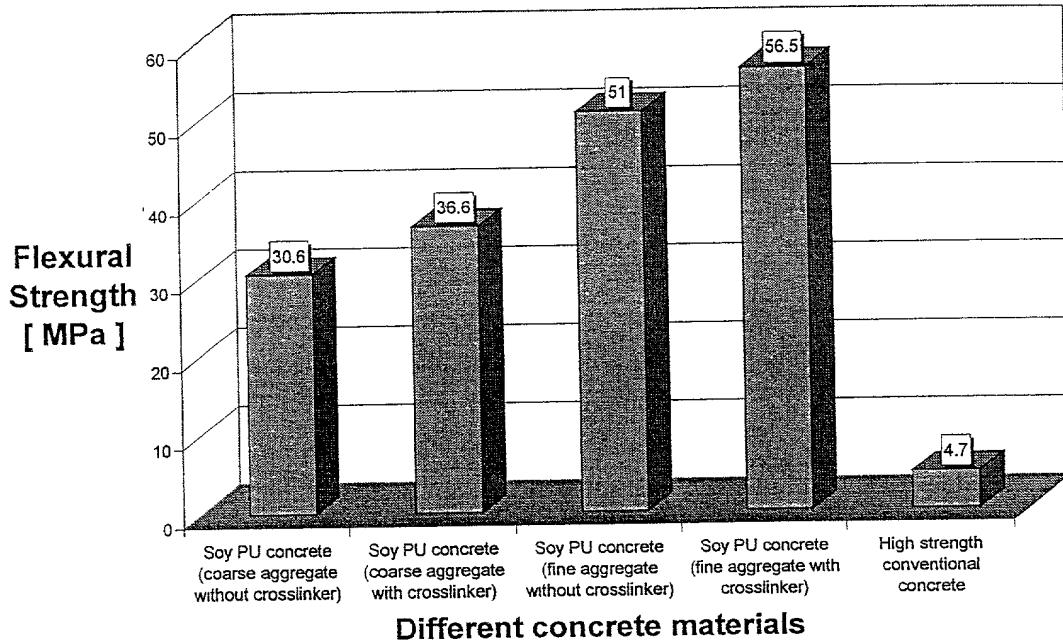


FIG. 34

### Compressive strength of Soy-based PU polymer concrete and conventional concrete

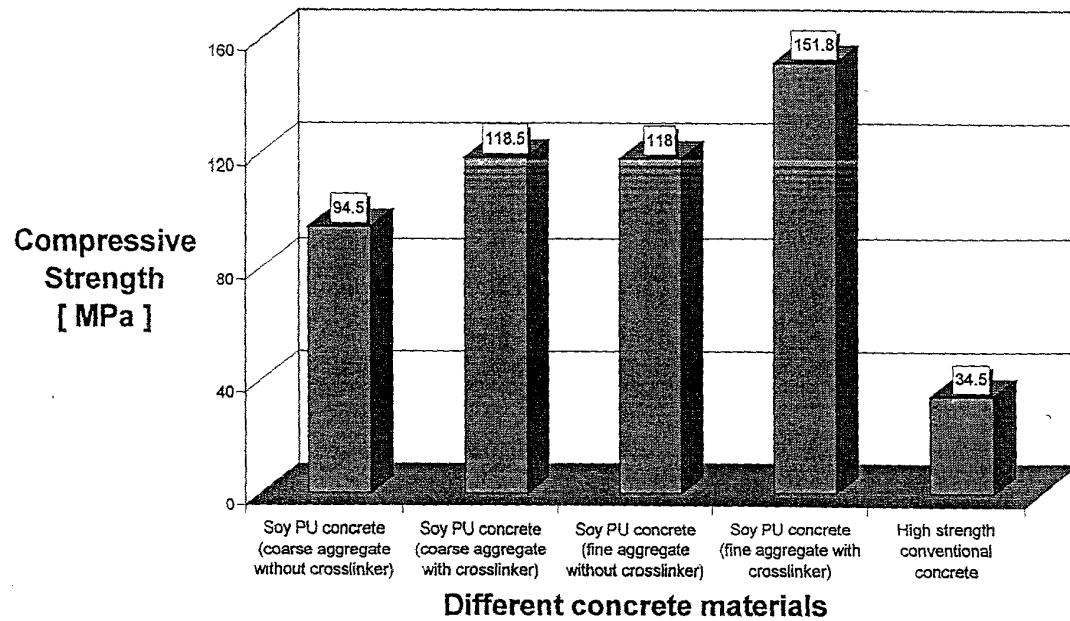


FIG. 35

### Abrasion resistance of Soy-based PU polymer concrete and conventional concrete

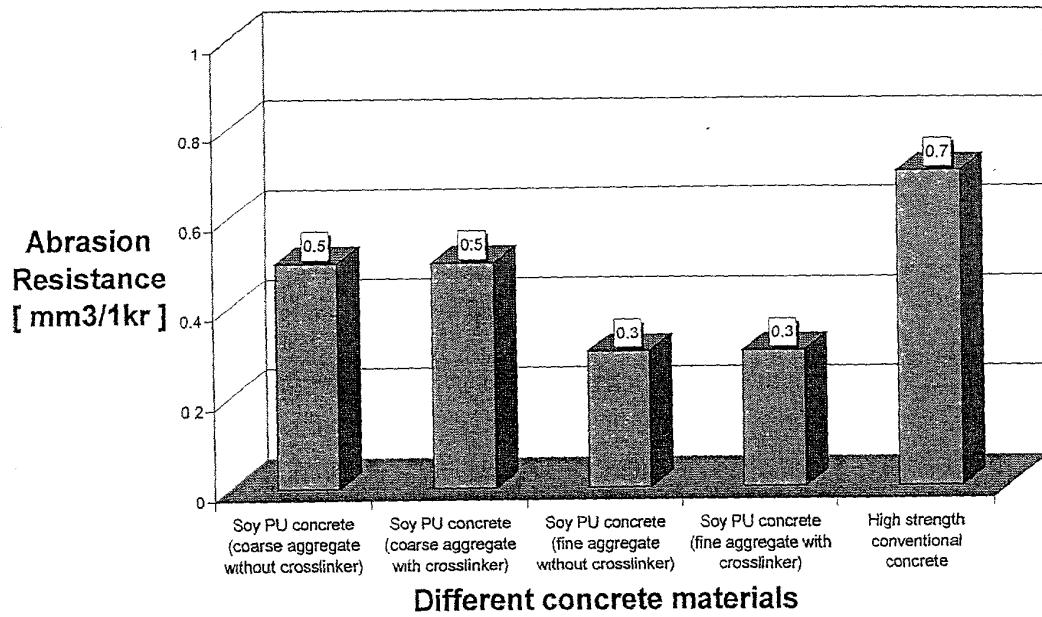


FIG. 36